IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A computer implemented method for performing a frequency-domain transform on frames of pixel values in a time-domain signal having a sequence length N ~~defining a pixel value~~, wherein the method is executed by a processor, the method comprising

decomposing the time-domain signal to a plurality of decomposed signals, wherein each of the plurality of decomposed signals includes a sequence length less than N;

performing a transform on the plurality of decomposed signals to obtain a transformed signal;

composing the plurality of transformed signals to obtain a composed signal, including a sub step of

scaling at least one of the transformed signals to define the pixel value.

Claim 2 (Original): The method of claim 1, further comprising

determining a value for a scale factor based on N; and

using the determined value for a scale factor in the sub step of scaling at least one of the transformed signals.

Claim 3 (Original): The method of claim 2, wherein the steps of claim 1 are performed in real time and wherein the step of determining a value for a scale factor is performed in non-real time.

Claim 4 (Original): The method of claim 1, further comprising

determining a value for a scale factor; and

using the determined value for a scale factor in the substep of scaling at least one of the .transformed signals.

Claim 5 (Original): The method of claim 4, wherein a value for a scale factor is a constant.

Claim 6 (Original): The method of claim 5, wherein a value for a scale factor is zero.

Claim 7 (Original): The method of claim 1, wherein the frequency-domain transform includes a discrete cosine transform.

Claim 8 (Original): The method of claim 7, wherein the substep of scaling at least one of the transformed signals includes a sub step of

using a factor of $\dfrac{1}{2\cos(\dfrac{\pi K}{N})}$

Claim 9 (Currently Amended): An apparatus for performing a frequency-domain transform on a time-domain signal defining a frame of pixel values having a sequence length N, the apparatus comprising

a processor configured to;

a decomposing process for decomposing decompose the time-domain signal to a plurality of decomposed signals, wherein each of the plurality of decomposed signals includes a sequence length less than N;

a transform process for perform[[ing]] a transform on the plurality of decomposed signals to obtain a transformed signal;

a composing process for composing compose the plurality of transformed signals to obtain a composed signal; and

a scaling process for scaling scale at least one of the transformed signals to define the pixel values.

Claim 10 -17 (Cancelled)

Claim 18 (New): The apparatus of claim 9, further configures to determine a value for a scale factor based on N; and use the determined value for a scale factor in scaling at least one of the transformed signals.

Claim 19 (New): The apparatus of claim 18, wherein a value for a scale factor is a constant.

Claim 20 (New): The apparatus of claim 19, wherein a value for a scale factor is zero.

Claim 21 (New): The apparatus of claim 20, wherein the frequency-domain transform includes a discrete cosine transform.

Claim 22 (New): The apparatus of claim 20, wherein the scaling at least one of the transformed signals includes using a factor of $\dfrac{1}{2\cos(\dfrac{\pi K}{N})}$

Claim 23 (New): A computer-readable medium including instructions executable by a processor for performing a frequency-domain transform on a time-domain signal on frames of pixel values having a sequence length N,-by performing the steps of:

decomposing the time-domain signal to a plurality of decomposed signals, wherein each of the plurality of decomposed signals includes a sequence length less than N;

performing a transform on the plurality of decomposed signals to obtain a transformed signal;

composing the plurality of transformed signals to obtain a composed signal; and

scaling at least one of the transformed signals to define the pixel values.

Claim 24 (New): The computer-readable medium of claim 23, further comprising

determining a value for a scale factor based on N; and

using the determined value for a scale factor in the sub step of scaling at least one of the transformed signals.

Claim 25 (New): The computer-readable medium of claim 24, wherein the steps of claim 1 are performed in real time and wherein the step of determining a value for a scale factor is performed in non-real time.

Claim 26 (New): The computer-readable medium of claim 23, further comprising
determining a value for a scale factor; and
using the determined value for a scale factor in the substep of scaling at least one of the .transformed signals.

Claim 27 (New): The computer-readable medium of claim 25, wherein a value for a scale factor is a constant.

Claim 28 (New): The computer-readable medium of claim 26, wherein a value for a scale factor is zero.

Claim 29 (New): The computer-readable medium of claim 23, wherein the frequency-domain transform includes a discrete cosine transform.

Claim 30 (New): The computer-readable medium of claim 28, wherein the substep of scaling at least one of the transformed signals includes a sub step of

using a factor of $\dfrac{1}{2\cos(\dfrac{\pi K}{N})}$